DOCUMENT RESUME

ED 434 338 CS 216 891

AUTHOR Ediger, Marlow
TITLE Providing Leadership in the Language Arts and the Psychology of Learning.
PUB DATE 1999-09-00
NOTE 15p.
PUB TYPE Opinion Papers (120)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Educational Psychology; Elementary Education; *Language Arts; Leadership; *Principals; Student Needs; *Teacher Role
IDENTIFIERS Bruner (Jerome S); Curriculum Emphases; Piaget (Jean)

ABSTRACT

This paper contends that, if pupils are to achieve as optimally as possible, the principal needs to provide quality leadership in having teachers stress vital principles of learning from educational psychology. The paper states that there are selected principles of learning that all schools of psychology emphasize. It first enumerates and elaborates on five of these principles. Noting that there are specific schools of thought in the psychology of learning that principals need to understand to help their teachers in teaching pupils, the paper then discusses these diverse psychologies of learning, including (1) the measurement movement; (2) constructivism; and (3) pupil decision-making. The paper also considers the contributions of Jerome Bruner and Jean Piaget, two outstanding educational psychologists. It continues by discussing the basics in the curriculum, that is, the importance of pupils learning what is basic. Finally, the paper concludes by reiterating the different psychologies of learning. (Contains 14 references.) (NKA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 434 338

Providing Leadership in the Language Arts and the Psychology of Learning

by Marlow Ediger

1999-09

CS 216 891

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PROVIDING LEADERSHIP IN THE LANGUAGE ARTS AND THE PSYCHOLOGY OF LEARNING

As the leader of the school, why should the principal have much knowledge about how pupils learn? Why then should the psychology of learning be stressed in the curriculum? If pupils are to achieve as optimally as possible, the principal needs to provide quality leadership in having teachers stress vital principles of learning from educational psychology. There are selected principles of learning that all schools of psychology emphasize.

Principles of Learning and the Curriculum

Which principles of learning are common to all educational psychologies? First, pupils should experience interesting learning opportunities. This is necessary so that pupils achieve as much as possible by attending to the ongoing learning opportunity. When supervising student teachers and cooperating teachers in the public schools, many lessons have fallen flat due to teachers not securing the interests of learners. Voice inflection and fascinating materials of instruction need to be used so that pupils' attention is captured within the ongoing learning activity. Even within a workbook experience, pupils attention can be obtained. Writers in education are very critical about workbooks being used in teaching and learning. How good workbooks are as learning opportunities depends upon their use. The workbook, in and of itself, is neither good nor bad, but how it affects pupils is what is important. If pupils are to learn about propositions, this can indeed be dull and dry. An ingenuous teacher can make preposition learning extremely interesting. Thus, if pupils are learning about the prepositions-- "in front of," "in back of," and "behind." Learners can be actively involved by dramatizing what these prepositions refer to. A pupil may then stand "in front of," "in back of," and/or "behind" some other member of the class. Each dramatization needs to be recorded in sentence form for pupils to see and analyze. Thus, a sentence written on the chalkboard may read, "Bob stood in front of Bill." Learners find these kinds of experiences to be very enjoyable. They can even suggest other relationships such as a pupil standing "on the side of" someone else.

In addition to dramatizations, pupils may also draw a person and his/her relationship to someone else, such as in the above named prepositions. Interest is a powerful factor in learning and it behooves the teacher to make learning opportunities as interesting as possible with whatever materials of instruction are being used. Materials of instruction such as workbooks and basal texts are neutral and not bad or good, but it depends upon how these are used in teaching pupils.

A second principle of learning involves pupils establishing purpose for what is being taught. It makes learning purposeless if a pupil does not perceive reasons for learning. Thus, reasons or purpose for learning need to be stressed. Establishing purpose may take very little time. If pupils are to study the use of syllabication to unlock unknown words, the teacher may say, "One way to figure out unknown words when reading is to divide a word into syllables or meaningful parts. I will give examples and demonstrate how this can help to unlock unknown words when reading." Words used here need to be on the understanding level of pupils. The teacher then lists a few words on the chalkboard to focus upon which come from the basal reader. These words are carefully chosen so that pupils may learn how to divide words into syllables and thus recognize the original unknown word(s). Many times pupils will tend to memorize that which lacks purpose, especially if a test is forthcoming.

Third, intrinsic motivation, rather than extrinsic motivation is desirable in learning. With intrinsic motivation, the pupil has an inward desire to learn. From within, the pupil desires to learn what is being presented. The teacher needs to be skillful in teaching so that a pupil will possess interest and purpose for learning in order that motivation is at a high level for achievement. Extrinsic motivation may be used when intrinsic factors do not work effectively. with extrinsic motivation, a pupil receives rewards and prizes for leaning and achieving specific goals. The learner needs to know ahead of time what is to be learned and how much in order to receive the announced award or prize. Thus, pupils may receive the extrinsic reward if he/she spells fifteen words correctly from the weekly list being emphasized in teaching and learning. The exact award and what is to be learned needs to be announced clearly, prior to instruction, when extrinsic motivation is in evidence. Extrinsic motivation approaches should be used only when other procedures do not motivate pupils to learn. These approaches are time consuming in that the prizes need to be obtained ahead of time, prior to instruction, and then careful records kept as to what a pupil needs to learn to obtain the reward. The prizes must be chosen on the basis of being able to motivate and encourage leaning. Hopefully, a pupil will not learn merely to obtain a prize, but rather to become interested and motivated to achieve in ongoing lessons and units of study. Extrinsic motivation should cease when a pupil no longer needs a reward to learn. There is a caution here in that pupils may become hooked on extrinsic motivation approaches and will put forth effort only, if these external prizes are provided for achievement. Ideally, learning should be its very own reward in which intrinsic motivation predominates.

Fourth, the principal of the school needs to assist teachers to use a variety of activities in the classroom to achieve vital objectives. Why should a variety of activities be provided to pupils? Pupils differ from each other in many ways such as in abilities, interests, and background

knowledge as well as skills possessed to benefit from a given lesson or unit of study. This means that a teacher should permit choices, if possible, for pupils as to means and methods of learning. There are numerous kinds of learning activities, such as learning from reality, pictures and visuals, as well as print and abstract sources. Print/abstract sources involve listening, speaking, reading, and writing. Multiple Intelligences Theory (Gardner, 1993) emphasizes the importance of pupils learning in different ways and in diverse approaches. A single procedure will not fit all sizes. Thus, the teacher needs to individualize instruction so that each pupil may learn as much as possible.

Fifth, meaning theory is very salient to emphasize in teaching and learning (Ediger, 1997, 107-108). Pupils then need to understand what is taught, not memorize what is being learned. Understanding subject matter acquired might well mean to put it into one's own words. Using what has been acquired might also indicate that the inherent subject matter is understood. When pupils do not understand that which is taught, they may immediately memorize the contents for a test or turn off on the learning activity. When pupils turn off on what is being emphasized in teaching and learning, the teacher's time as well as the learner's is being wasted. It behooves the teacher to use each precious moment carefully so that optimal achievement on the pupil's part is possible. Does this eliminate fun in learning? Not at all. Learning opportunities can be fun! The writer has observed and supervised student teachers and cooperating teachers in the public schools stressing the following learning opportunities:

1. singing songs about parts of speech in sentences. There are pupils who possess musical intelligence and may take a leadership role here.
2. developing a colorful mural pertaining to parts of speech.
3. writing poetry for each part of speech.
4. using collaborative and individual endeavors in writing a creative narrative on parts of speech.
5. making an illustrated chart containing unique definitions and sentences with the different parts of speech.

Whatever is taught needs to be meaningful to pupils. Enjoyment in learning at the same time may be stressed regardless of subject matter taught . The role of the principal of the school is to assist teachers to implement each of the principles of listed and discussed above to increase pupil leaning in as optimal manner as possible. The principal has a complex task in guiding teachers to improve the curriculum. Quality leadership is necessary to assist in developing teaching and learning situations to accommodate each pupil (Ediger, 1999, 212-218).

Psychologies of Learning

There are specific schools of thought in the psychology of learning that principal's need to understand to help their teachers in teaching pupils. A project method may work well for selected pupils. Here, pupils are actively involved in learning. Projects may stress committee work or individual tasks. Pupils need to be doers, not hearers only, when the project method is being emphasized. Within an ongoing unit of study, the principal may assist teachers to have pupils raise questions that lead in the direction of a project. Thus, if pupils with teacher guidance are discussing Maurice Sendak's book Where the Wild Things Are, a committee may volunteer to make a movie of the contents. This is the first step in the project method and that is to have pupil purpose. Pupils then perceive reasons for the ongoing learning opportunity. The second step of the project method involves planning. How to do the project needs meticulous plans. Haphazard planning does not work. A cardboard box, twenty inches wide may be used with dowel rods going through the length of the box, one rod at the top and the other toward the bottom. On a roll of paper, committee members may place different scenes sequentially from this library book. Careful planning is necessary so that each scene on the roll of paper is clear. In the committee, pupils need to divide responsibilities for drawing and coloring. A cassette recording should be made pertaining to each scene in which the speaker elaborates upon the inherent content form Maurice Sendak's book. Appropriate standards need to be developed for making the recorded narration.

The third step in the project method is to carry out the plans. Here, pupils need to stay on task and satisfactorily complete their individual responsibilities within the committee setting. Questions will arise as to how to commence or how to do something. Pupil interactions is to be encouraged. Harmonious working together is important in the project method. Respect and accepting each other's ideas are important. The teacher is one who encourages, supervises, and assists committee members to be successful in committee endeavors.

A fourth step in the project method is to have pupils evaluate the quality of the project. This can take time for quality evaluation to take place. Pupils with teacher guidance then need to develop appropriate criteria to appraise the total project. Each criteria must be valid and reflect the quality of work completed in the project method. Evaluation should not destroy but increase further interest in the project method. Evaluation here becomes a learning experience (See Ediger, 2000, 67-76).

The Measurement Movement as a Psychology of Learning

Many states and school districts desire measurable results to indicate how well pupils are achieving. Percentile ranks, standard deviations, and other numerical results then are in the offing. Thus, objectives for pupils to attain need to be stated in a precise manner. No leeway exits then for interpretation of what will be taught when observing these behaviorally stated objectives. A pupil either has or has not achieved the objectives as a result of instruction. The following are examples:

1. The pupil will list in writing the eight parts of speech.
2. The pupil will write a definition for each of these eight parts of speech.
3. The pupil will write sentences for each part of speech and underline as well as label the part of speech being indicated.
4. The pupil will analyze a written product with underlined and labeled parts of speech. The pupil will state if the underlined part of speech is correctly named as well as telling why.
5. The pupil will write a poem of his/her own style of choosing by incorporating as many parts of speech as possible.
6. The pupil will apprise in a committee setting the quality of the poem as well as having used the parts of speech correctly within the written verse.

The first four listed examples above can be evaluated precisely if the objectives, as a result of leaning opportunities, have or have not been achieved by learners. Objectives five and six are a little more open ended but do indicate specifically what a pupil is to learn. A weakness of measurably stated objectives is that higher levels of cognition ends are increasingly difficult to write. The lower level objectives of listing and defining are easier to write when using behaviorally stated objectives. The purpose of these objectives is to be able to measure precisely what pupils have learned. A weakness of behaviorally stated objectives is that lower cognitive level of objectives may be emphasized in teaching since precise, measurably stated objectives are used in the instructional arena.

Both standardized tests and state mandated tests indicate pupil achievement by using numerical terms. A pupil then being on the fiftieth percentile provides a specific score or rank which can be compared with the performance of other learners having taken the same test. A question that arises then pertains to the following: Can important learnings be evaluated by using a single numeral to indicate learner achievement? Generally standardized and state mandated tests are given once a year, and in some cases less frequently, and yet pupil pupil products and processes from learning accrue on an hourly basis or more frequently, in the classroom. Much of what pupils are learning or have learned then is not reflected in standardized or state mandated tests. The latter two tests

are more of a one shot case and tend not to provide information on what pupils have learned in the classroom. Nor do they assist in diagnosing what pupils have left to learn, since what is incorrect in responses is not available to teachers.

A logical sequence is in evidence when behaviorally stated objectives are used in teaching pupils. Thus, the teacher determines the order of objectives to be emphasized in teaching. The teacher aligns the learning opportunities with the stated objectives and evaluates, after instruction, if the objectives have been achieved. The teacher does these things logically.

Constructivism as a Psychology of Learning

A rather recent psychology of teaching and learning involves constructivism. This is a somewhat opposite point of view as compared to behaviorism with its behaviorally stated objectives. Constructivism stresses what pupils are learning in the classroom and not what test writers, external to the local situation, believe needs to be emphasized in the curriculum. With constructivism, there may be pupil/teacher planning of the objectives for instruction. Input from learners in the classroom is also invited in the selection of learning opportunities to achieve objectives. Cooperative evaluation is emphasized on a lesson by lesson or day by day basis. There are continuous chances for the teacher to assist pupils, as needed, in ongoing activities. Diagnosis and remediation may also be emphasized as necessary. A psychological sequence is involved here due to learner involvement in planning the curriculum.

For a longer period of time in evaluation, the pupil with teacher guidance may develop a portfolio. The portfolio contains representative work of the learner which may then be shared in a parent/teacher conference. the following items, as examples, may be placed into a portfolio:

1. written work such as poems, stories, plays, outlines, and summaries.
2. art products that relate to ongoing lessons and units of study.
3. construction endeavors that express what has been learned.
4. snapshots of items too large to be placed into a portfolio.
5. cassette recordings of book reports and oral presentations.
6. videotapes of important participations in committee work. The portfolio should not be too voluminous nor be too limited in scope, but should indicate to responsible persons what a pupil had achieved (Ediger, 1999, 26-27).

Pupil Decision -making as a Psychology of Learning

To optimalize pupil decision making, the teacher may establish learning stations. An adequate number needs to be in the offing so that pupils individually may select what to learn and what to omit. Time on task is very important in the decision making process. The teacher is a guide, not a lecturer, and assists pupils where necessary. Each station may have five tasks for pupils to complete listed on a card. The following is an example of learning opportunities on a task card from which a pupil may select to work on:

1. select an illustration from the file and write a limerick.
2. read several poems from the children's anthology at this center and write a list of unique words and descriptive phrases that you noticed.
3. make a list of your favorite poems from the children's anthology located at this center. Design a cover for the booklet of favorite poems that you chose.
4. construct a model illustrating your favorite poem using the materials at the library corner in the classroom.
5. pantomime a favorite poem you have read and let classmates guess the content of the pantomimed poem (See Ediger, 1998, 183-191).

The above tasks are a sample of learning opportunities contained at one learning station. Perhaps five or six additional stations need to be developed so that pupils may truly sequence their very own learnings. At each learning station, there needs to be concrete, semiconcrete, and abstract materials which pupils may use to complete a task. If a pupil has a unique task that he/she wishes to work on, this needs to be discussed with the teacher. Pupils decide what to learn and what to omit. They are the decision makers and must be responsible individuals to remain busy with the chosen tasks at hand. A psychological, not logical curriculum, is in evidence when pupils choose sequentially what is to be learned.

An openended curriculum is certainly in evidence when learning stations are used in teaching and learning. There is a structure and that is the stations have been developed by the classroom teacher. Beyond that, a flexible, openended curriculum is certainly in evidence, even to the point of the learner planning a particular task, with the teacher, if the former wishes to do so (Ediger, 1998, 183-191).

There are selected psychologists in education that deserve attention and recognition when thinking of outstanding contributions in teaching and learning. Jerome Bruner (see Joyce, Hersh, and Mc Kibbin, 1983) emphasized strongly that subject matter specialists should identify vital knowledge for pupils to achieve. These academicians in their academic areas of specialization, after having identified structural ideas, would make these salient ideas available to teachers for use in teaching and learning. Thus, Bruner believed that the academician held

the keys in selecting what is vital for pupils to learn, omitting the trivia and the insignificant. It would be the teacher's job to implement these structural ideas with quality leaning activities. Pupils should work as the academician works and use the same or similar tools of learning. The Methods of doing by pupils would model those used by the academician.

What Bruner had in mind was for pupils to achieve structural ideas that the specialist, the academician, would deem to be important. Thus, the linguist might well stress the following for pupils in a meaningful and interesting way, based on the present achievement level of the learner:

1. sentence patterns that recur again and again. With recurrence of these patterns, the structure of knowledge would be in evidence. Another name for structural ideas would be key ideas. Insignificant content then could be minimized or eliminated.

2. ways of expanding each of these sentence patterns. Pupils would discover knowledge or structural ideas rather than being told answers to questions or receive lectures on subject matter.

3. use of stress, pitch, and juncture. Learners are to work as academicians in acquiring information. When learning the structure of the English language, pupils approach the task as linguists and use the methodology of the latter.

4. academicians in their respective areas of specialization cooperatively develop structural or key ideas for pupils to attain.

5. teachers using structural ideas as objectives for pupils to achieve. Each teacher then selects quality learning opportunities so that pupils may achieve the structure of knowledge in an academic discipline.

Bruner showed great concern for pupils achieving vital subject matter. To achieve these structural learnings, Bruner stressed the use of three kinds of materials to use in teaching so that appropriate sequence would be in evidence. First, manipulative materials need to be used. Here, items and objects are used which might involve using one or more of the five senses. For example, when the language experience approach (LEA) is used in reading instruction. Pupils may view and discuss objects and items on an interest center and then provide ideas for the teacher to record on the chalkboard or word processor with a large accompanying screen. After the content has been recorded, Pupils with teacher guidance read the ensuing ideas. When pupils possess their own writing vocabulary, they should do their very own writing of personal experiences (Ediger, 1999, 14-16).

A second kind of material to use in teaching was referred to as iconic, by Jerome Bruner. Iconic materials were pictorial in nature, one step remove from the actual manipulative, mentioned above. With the experience chart, pictures could draw or collect pictures to be placed on the experience chart. The third kind of material to use in teaching, Bruner referred to as symbolic, such as print discourse. As the teacher

records talk written down as provided by pupils, the latter sees the symbolic evolve (Ediger, 1995, Chapter Four).

The following are salient points to remember pertaining to Bruner's structure of knowledge psychology as well as the author's reflection of goals in learning for pupils:

1. Concern over important subject matter to be taught. Important subject matter should always be appraised and identified by teachers, administrators, and university professors.

2. Quality sequence in learning. With good sequence, pupils learn more than if a negative sequential set of learnings are to be emphasized. With appropriate sequence, the new learnings are not too complex, nor to easy for pupils. The objectives then are challenging, but achievable.

3. Variety in learning opportunities with manipulative, iconic, and symbolic materials of instruction. The teacher needs to provide diverse kinds of learning opportunities so that the needs of each pupil are met.

4. Learning through discovery. There is a certain amount of excitement involved for each pupil when discovery learning, rather than being told answers to questions, is involved.

5. Using methods of acquiring information as emphasized by academicians in their respective areas of specialization. To be sure, pupils might learn these methods, along with others, in making sense out of the vast amount of knowledge available. Pupils, however, are not miniature academicians.

Jean Piaget (See Theissen, Wild, Paige, and Baum, 1989) emphasized developmental psychology as being salient when teaching pupils. Thus, Piaget stressed the importance of maturation when teaching pupils. Pupils then go through different stages of growth when the maturation ages ensue. From birth to eighteen months of age, pupils are in the stage of sensorimotor intelligence. With sensorimotor intelligence, the infant learns through the use of the five senses--seeing, feeling, smelling, tasting, and hearing. There are diverse objects that parents need to provide sensorimotor age infants to encourage the use of the five senses, such as objects that can be seen, felt, smelled, tasted, and heard by shaking.

Second, Piaget recognized the preoperational level of child development at ages eighteen months through six years, approximately. The preoperational years cover the kindergarten and first grade levels. Here the pupil needs real objects to refer to in ongoing learning opportunities The stage of preoperational level has a limitation in that one variable only, can be observed at a particular time. This can be illustrated when a child of preoperational development sees two tumblers, exactly the same size and configuration. Both are filled with water. The child voluntarily agrees that the same amount of water is in each tumbler. Water is poured from one of the two tumblers into a third

tumbler which is taller and thinner. The child watches as this is being done. Now he/she is asked which has more water, the original tumbler still standing filled with water or the taller, thinner tumbler. The preoperational child, perceiving one variable only, replies with, "The taller one."

A second experiment to indicate perceiving one variable only for the preoperational level of development child is to have the youngster view two lumps of clay and state that they have the same amount of clay. There, of course, must be no coercion in having the child agree. One of these two limps of clay is then flattened in front of the child. The latter is then asked which has more clay. He/she will say the flattened piece of clay since it is wider-- one variable only is noticed.

A third stage of child maturation is the stage of concrete operations. Here, pupils generally are in the second through fourth/fifth grades. These learners being in the stage of concrete operations, ages seven to eleven, need objects and items to refer to when being taught. Language growth has increased tremendously from the previous years, but the real objects still need to be there when increasingly abstract terminology is being used. The stage of formal operations, approximately begins at age twelve, requires increasingly less of the concrete objects when the act of teaching and learning are in evidence (Ediger, 1995, 97-100).

The following are salient points to emphasize when stressing Piaget's psychology in teaching and learning:

1. pupils through biological maturation, change much as they go through the elementary school years, in terms of what can be taught and what can be learned.
2. principles of maturation have much to do with the selection of objectives, learning opportunities, and evaluation procedures for pupils at different developmental levels.
3. biological development through maturation must be heavily involved in determining the school curriculum.
4. attention must not be ignored as to harmonizing maturation levels with the intellectual development of the learner.
5. teachers need to be astute planners of learning opportunities to take into consideration the concept of pupil maturation.

The Basics in the Curriculum

Many lay people and selected educators, over the years, have stressed the importance of pupils learning what is basic. These essential learnings then take care of avoiding trivia and the unimportant. A major problem is, "What are the basics?" There never has been agreement over what are the basics that all pupils should learn.

One has to look back to the years preceding and following the year

1938 when William Chandler Bagley came out with The Essentialist's Manifesto (Bagley, 1938). Bagley recommended the following:

1. rigorous achievement of scholastic standards for pupils before being promoted to the next grade level.
2. logical, chronological, and causal relationships being stressed in sequencing learnings for pupils.
3. emphasis upon the exact studies and minimizing the activity movement in teaching and learning.
4. vital subject matter be taught with an emphasis upon discipline whereby the pupil can learn and the teacher can teach without disturbances in the classroom.
5. teach subject matter having stood the test of recent times and not being subject to continuous change.

From the thinking of William Chandler Bagley as well as from the author's personal reflections, the following can be gleaned as being very worthwhile:

1. frills and fads should not be followed in selecting subject matter to be taught. Stable items also need careful consideration when choosing objectives of instruction and not subject matter which changes continuously.
2. there are basics such as reading, writing, arithmetic, science , and social studies that need to be taught, but how these are taught and the materials of instruction used varies as time moves on.
3. changes in school and in society need thorough consideration in curriculum development; however, the past should not be completely ignored. New procedures of teaching may not necessarily mean improved approaches of instruction.
4. whatever is taught needs to be evaluated, be it the previously stated objectives or the newer proposed ends of instruction. Acceptance of the curriculum needs to be based upon thought, problem solving, and merit, not upon whim and newness nor upon worshiping the past.
5. critical thinking is needed to compare and contrast diverse curricula. Decision making and the use of Democratic procedures are necessary in developing the best curriculum possible for children (Ediger, 1999, 28-30).

Goals 2000 spells out in considerable detail "what every student in this country should know and be able to do at each grade level" in the core academic subjects of English, mathematics, science, history, economics, geography, civics, government, foreign languages, and the arts. These new higher national standards -- which essentially establish a national curriculum -- are to be accompanied by equally challenging notional tests to measure whether the standards are being met by all schools and all students. This powerful, standards- based agenda is now being implemented by state educational authorities, who are gradually

imposing them on school districts (Clinchy, 1998).

Goals 2000 certainly does attempt to stress a basics approach which is to contain essential subject matter for all pupils to achieve. Achievement is to be determined through test results. Goals 2000 clearly spells out what pupils are to learn and to do.

Conclusion

The principal of the school has important responsibilities in assisting teachers to understand and use principles of learning from educational psychology. There are justifiable reasons given for each of these psychologies of learning.

1. the project method emphasizes that pupils with teacher guidance are heavily involved in determining the purpose, planning the purpose, implementing the purpose, and appraising the final product that involved the initial purpose or project. A pupil centered curriculum is certainly in evidence here.

2. the measurement movement stresses the writing objectives in mensurable terms. The achievement of pupils in attaining objectives might then be measured in using numerical terms. An adult centered curriculum is being emphasized with the measurement movement. Adults write, select learning opportunities for pupils to achieve the stated objectives, and choose evaluation procedures to ascertain if the ends have been attained by learners.

3. decision making strategies stress the importance of learners being in a key position to make choices sequentially as to what to learn as well as what to omit and lacks perceived purpose.

4. the structure of knowledge approach is quite adult centered in its design. Structural ideas are determined by academicians, usually university professors in their individual academic areas of specialization. Learning by discovery to achieve these key ideas would be more learner centered.

5. Piaget's psychology is important for the teacher to understand and implement in that pupils mature as they go through different biological stages. Expectations from the teacher differ as pupils move through each defined biological stage of development.

6. constructivism places much importance upon pupil/teacher interactions in the classroom on a lesson by lesson and day by day basis. There is much that transpires in these interactions. Contextual learning is vital and pupil learning is appraised within that context and not with one shot standardized or criterion referenced tests, administered yearly or less frequently.

7. the basics keeps coming up in educational writings as well as in newsmagazines and newspapers. Essential subject matter, not frills nor fads, should then comprise the curriculum for pupils.

References

Bagley, William Chandler (1938), "An Essentialist's Platform for Advancement of American Education," Educational Administration and Supervision, 24: 241-256.

Clinchy, Evans (1998), "Democratizing America's Public Schools," The Principal, 77 (5), 13-14.

Ediger, Marlow (1997), The Modern Elementary School. Kirksville, Missouri: Simpson Publishing Company, 107-108.

Ediger, Marlow (1999), Improving School Administration. Kirksville, Missouri: Simpson Publishing Company, 212-218.

Ediger, Marlow (1999), Teaching Science in the Elementary School, Second Edition. Kirksville, Missouri: Simpson Publishing Company, 2000.

Ediger, Marlow (1999), "Assisting Pupils in Reading Science Subject Matter," Oklahoma Reader, 35 (1), 14-16.

Ediger, Marlow (1995), Philosophy in Curriculum Development. Kirksville, Missouri: Simpson Publishing Company, Chapter Four.

Ediger, Marlow (1995), Philosophy in Curriculum Development. Kirksville, Missouri: Simpson Publishing Company, 97-100.

Ediger, Marlow (1999), "Writing Tall Tales in the Middle School," The Progress of Education, 26-27, printed in India.

Ediger, Marlow (1998), "Spelling and the Language Arts," Experiments in Education, 26 (11), 183-191. Published in India.

Ediger, Marlow (1999),"The Unexpected in Science," The Hoosier Science Teacher, 25 (1), 28-30.

Gardner, Howard (1993), Multiple Intelligences, Theory into Practice. New York: Basic Books.

Joyce, Bruce, Richard B. Hersh, and Michael Mc Kibben (1983), The Structure of School Improvement. New York: Longman, Inc., 257-260.

Theissen, Diane, Margaret Wild, Donald D. Page, and Diane L. Baum (1989), Elementary Mathematical Methods. New York: Macmillan Publishing Company, 71, 72.